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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,555	08/14/2001	James P. Janniello	YOR920010026US2	9835
7590 06/08/2005			EXAMINER	
Ryan, Mason & Lewis, LLP 1300 Post Road, Suite 205 Fairfield, CT 06430			REILLY, SEAN M	
			ART UNIT	PAPER NUMBER

2153

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,555

Applicant(s)

JANNIELLO ET AL.

Examiner

Sean Reilly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action is a first action on the merits of this application. Claims 1-20 are presented for further examination.

Priority

1. The Applicant claims priority to provisional application 60/260594.
2. The effective filing date for the subject matter defined in the pending claims in this application is 1/9/2001.

Information Disclosure Statement

3. It is noted that no information disclosure statement (IDS) has been submitted.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
5. Claims 19-20 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 18, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., a recordable medium) and intangible embodiments (e.g., transmission medium). As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- a. Specifically with regard to claims 5-7, the specification failed to disclose *determining* a server cache size limit. The term *determining*, presumes the system is capable of deriving this information, however no such support is found in the specification. The specification merely provides support for a person manually entering this value, Spec pg 10.
- b. With regard to claims 8-10, the specification failed to disclose *determining* an estimated client cache size limit. The term *determining*, presumes the system is capable of deriving this information, however no such support is found in the specification. The specification merely provides support for entering this value, Spec pg 13.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 8-10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
8. With regard to claim 8, the term "estimated client-side cache limit" is ambiguous. It is not clear what the estimated value actually represents since data is broadcast to a plurality of clients and not just one client.
9. With further regard to claim 8, the limitation "waiting for a drain interval when said estimated client-side cache size limit is reached" is indefinite. It is not clear what *waits* for the interval to expire. Additionally the term "drain" is ambiguous. It is presumed that after a broadcast limit (client side cache size) is reached the system stops *all broadcasts* (e.g. in the case of a satellite, all transmissions on the satellite link cease) and waits a finite amount of time before broadcasting again, so room (cache space) can be made for new broadcast data to be received at the client side.
10. With regard to claim 12, the claim as written is indefinite. It is presumed content is determined to be of interest to the user when a category of said content matches one or more categories selected by said user.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-3, 5-7, 11, and 13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations).
12. With regard to claims 1, 17, and 19, Nations disclosed a method for selecting digital content for broadcast delivery to multiple users, said method comprising the steps of:
 - identifying content of interest to multiple users (Col 10, lines 53-56); and
 - broadcasting said content of interest to multiple users (Col 9, line 64 – Col 10, line 7) for storage in a client-side cache (Col 8, lines 52-58).
13. With regard to claim 5, Nations disclosed a method for selecting digital content for broadcast delivery to multiple users, said method comprising the steps of:
 - determining a server cache (e.g. a gateway cache, Figure 1, Component 17) size limit (Col 5, lines 3-10, required for storage in the cache);
 - identifying content of interest to multiple users (Col 10, lines 53-56);
 - limiting said content of interest to said server cache size limit (Col 5, lines 3-10, required for storage in the cache); and

- broadcasting said content of interest to multiple users for storage (Col 9, line 64 – Col 10, line 7) in a client-side cache (Col 8, lines 52-58) (Applicant's attention is drawn to the definition of a "local proxy server" Col 8, line 66- Col 9, line 5).

14. With regard to claims 11, 18, and 20, Nations disclosed a method for storing digital content in a client-side cache, said method comprising the steps of:

- receiving content broadcast from a central server (Col 9, line 64 – Col 10, line 7);
- storing said received content in said client-side cache (Col 10, lines 56-65) if said content is of interest to a user (Col 10, lines 46-56);
- determining if requested content is in said client-side cache before requesting said content from a remote source (use of a cache, Col 9, lines 19-25).

15. With regard to claims 2, 3, 6, 7, 12, and 13, Nations disclosed the step of identifying content of interest to multiple users further comprises the step of statistically analyzing recent user requests for content or the step of a user profile (Col 10, lines 53-56).

16. With regard to claim 14, Nations disclosed the step of requesting said content from an edge server (e.g. Gateway Figure 1) if said requested content is not in said client-side cache (Col 9, lines 19-25).

17. With regard to claim 15, Nations disclosed the step of requesting said content from a provider of said content if said requested content is not in said client-side cache (Col 10, lines 9-19).

18. With regard to claim 16, Nations disclosed the step of requesting said content from said remote source using a lower capacity link than a link that receives said content broadcast from a central server (Col 9, lines 6-18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 4 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations) and Sen et al. (U.S. Patent Number 6,691,312; hereinafter Sen).

20. With regard to claims 4 and 8, Nations disclosed a method for selecting digital content for broadcast delivery to a plurality of client-side caches, said method comprising the steps of:

- identifying content of interest to multiple users (Col 10, lines 53-56); and
- broadcasting said content of interest to said plurality of client-side caches (Col 9, line 64 – Col 10, line 7;

However Nations failed to specifically recite:

- determining an estimated client-side cache size limit;
- broadcasting until said estimated client-side cache size limit is reached;
- waiting for a drain interval when said estimated client-side cache size limit is reached.

In an analogous art, Sen disclosed a system for broadcasting content to multiple users simultaneously based on a derived transmission schedule (Abstract). Sen determines an estimated client-side cache size limit (buffer size, Col 15-18) for use in developing an optimized (smoothed) broadcast schedule (Col 2, lines 4-12). The broadcast schedule in Sen's system,

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broadcasts content to clients in intervals such that clients (node children) can appropriately drain (consume) content in the cache (i.e. broadcasting until the cache is full and then continuing after a time period – transmission variability) (see inter alia, Col 3, lines 29-48 and Col 8, Section A).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the broadcast transmission scheduling disclosed by Sen within Nations system, since the total transmission bandwidth requirements will be reduced (Sen Col 3, lines 44-48).

21. With regard to claims 9 and 10, Nations disclosed the step of identifying content of interest to multiple users further comprises the step of statistically analyzing recent user requests for content or the step of a user profile (Col 10, lines 53-56).

22. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations) and Shimomura et al. (U.S. Patent Number 6,526,580; hereinafter Shimomura).

23. With regard to claim 12, Nations fails to specifically recite storing said received content if said content is of interest to a user compares a category of said content to one or more categories selected by said user. Nevertheless storing content of interest to a user based on categories selected by a user was well known in the art, as evidenced by Shimomura. In an analogous art Shimomura disclosed a content broadcasting service where broadcasted content is stored (cached) if the content matches a category (interest parameters) selected by the user (Col 4, lines 27-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the content storage system disclosed by Shimomura within Nations, in order to

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reduce communication and computer costs associated with serving large amounts multimedia content (Shimomura Col 2, lines 11-16).

Conclusion

24. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.


25. This office action is made **NON-FINAL**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


5/25/05


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